ABSTRACT OF THE DISCLOSURE

A spine filling device comprises a filling member and a pasty medicine. The filling member is formed of a holding portion and an injection port, which are integrally formed by a flexible and permeable wall having a plurality of pores, each having a diameter smaller than 0.1 mm. The filling member is contracted before being implanted in a spinal segment or between two adjacent spinal segments. The pasty medicine is injected into the holding portion via the injection port, thereby resulting in expansion of the filling member. The pasty medicine is securely lodge in the spinal segment or between the two adjacent spinal segments upon completion of solidification of the pasty medicine.